



Psychometric Testing of Three COVID-19-Related Scales Among People with Mental Illness

Kun-Chia Chang^{1,2} • Wen-Li Hou^{3,4} • Amir H. Pakpour^{5,6} • Chung-Ying Lin^{7,8} • Mark D. Griffiths⁹

Published online: 11 July 2020

© Springer Science+Business Media, LLC, part of Springer Nature 2020

Abstract

Fear of novel coronavirus 2019 (COVID-19) may result in psychological health problems among different populations. Moreover, believing COVID-19 information and preventive COVID-19 infection behaviors are relevant constructs associated with fear of COVID-19. Therefore, the present study validated three instruments assessing fear, beliefs, and preventive behaviors related to COVID-19 among individuals with mental illness. Moreover, relationships between the three constructs were examined. Individuals with mental illness ($N = 400$; 178 females; mean age = 46.91 years) completed the Fear of COVID-19 Scale (FCV-19S), Believing COVID-19 Information Scale (BCIS), Preventive COVID-19 Infection Behaviors Scale (PCIBS), and Depression Anxiety Stress Scale-21 (DASS-21). The FCV-19S, BCIS, and PCIBS demonstrated a single-factor structure with satisfactory fit indices. Moreover,

Kun-Chia Chang and Wen-Li Hou contributed equally to this work.

✉ Chung-Ying Lin
cylin36933@gmail.com; cy.lin@polyu.edu.hk

¹ Jianan Psychiatric Center, Ministry of Health and Welfare, Tainan, Taiwan

² Department of Natural Biotechnology, NanHua University, Chiayi 622, Taiwan

³ Department of Nursing, Kaohsiung Medical University, Kaohsiung, Taiwan

⁴ Adjunct Research Fellow, Department of Medical Research, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan

⁵ Social Determinants of Health Research Center, Research Institute for prevention of Non-Communicable Diseases, Qazvin University of Medical Sciences, Qazvin 3419759811, Iran

⁶ Department of Nursing, School of Health and Welfare, Jönköping University, Jönköping, Sweden

⁷ Department of Rehabilitation Sciences, Faculty of Health and Social Sciences, The Hong Kong Polytechnic University, 11 Yuk Choi Rd, Hung Hom, Hong Kong

⁸ Institute of Allied Health Sciences, College of Medicine, National Cheng Kung University, Tainan, Taiwan

⁹ International Gaming Research Unit, Psychology Department, Nottingham Trent University, Nottingham, UK